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METHODS AND APPARATUS PROVIDING REMOTE OPERATION OF AN APPLICATION PROGRAMMING INTERFACE

ABSTRACT OF THE DISCLOSURE

A system can analyze an application programming interface definition to automatically produce software string generator and parser software components allowing remote access to functions within the application programming interface definition by processes that are not natively compatible with the computing system environment in which the application programming interface operates. A first string generator processes can produce an encapsulated function call from a first process, such as a Java-based process, that calls a first function in a first computing environment. A second parser process operates in a second computing environment to receive the encapsulated function call and to invoke a second function call in a second process, such as a C-based process. Results from the second function call are returned to a second string generator which produces an encapsulated response that is returned to a first parser process. The first parser process maps the encapsulated response back into first function call parameters for return to the first process, thus providing access to second functions of the application programming interface by the first process.